

REMARKS

Claims 1-32 are currently under examination. Applicants are pleased to note that Claims 14-32 have been allowed. Claims 7, 8, 10 and 11 were objected to as being dependent on a rejected base claim and were found to be allowable if rewritten in independent form to include all of the limitations of the base claim. Claims 1-6, 9 and 12-13 stand rejected. Claim 1 has been amended to indicate that at least one of the ferromagnetic layer is deposited by ALD. This amendment is fully supported by the application as filed, for example in original Claims 6 and 9. New Claims 52 and 53 have been added. These new claims find support in original claims 6-11.

Claim Rejections Under 35 U.S.C. §102

Claims 1-3, 5-6, 9, and 12-13 were rejected as anticipated by Daughton et al. (U.S. Patent No. 6,404,191). The Examiner found that Daughton et al. discloses a method of fabricating a magnetic memory cell in which "the first and second ferromagnetic layer is formed by atomic layer deposition."

Applicants respectfully disagree with the Examiner and submit that Daughton et al. has no teaching of depositing any layer, much less a ferromagnetic or dielectric layer, by atomic layer deposition. As the Examiner is aware, atomic layer deposition (ALD) is a term of art that refers to a particular deposition process. Solely for the purpose of clarification, Applicants have amended Claim 1 to recite the alternating, self-saturating nature of the ALD process.

The Examiner specifically refers to column 4, lines 58-60 and column 5, lines 55-58 for the teaching of ferromagnetic layers deposited by ALD. These sections of the Daughton et al. patent do refer to the deposition of ferromagnetic layers. However, there is no teaching or suggestion of depositing the layers by ALD. The mention of the "atomic %" of each component of the film does not relate to an ALD process, but only to the composition of the deposited film.

As there is no teaching or suggestion of depositing ferromagnetic layers by an atomic layer deposition process comprising alternating self-saturating surface reactions, Applicants request the withdrawal of the rejection over Daughton et al.

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Claim Rejections Under 35 U.S.C. §103

Claim 4 was rejected as obvious over the combination of Daughton et al. and Park et al. (U.S. Patent No. 6,144,060). Claim 4 depends from Claim 1. Claim 1 has been amended to indicate that at least one of the ferromagnetic layers is formed by atomic layer deposition. As discussed above, Daughton et al. do not teach or suggest formation of the ferromagnetic layers by an atomic layer deposition process. This deficiency is not made up for by Park et al. Thus, Applicants request withdrawal of the rejection of Claim 4 under 35 U.S.C. §103.

Conclusion

In view of the amendments and arguments presented herein, Applicants believe that all claims are in condition for allowance. If, however, some minor issues remain, the Examiner is invited to contact Applicants' counsel at the number provided below in order to resolve such issues promptly.

Respectfully submitted,

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